Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

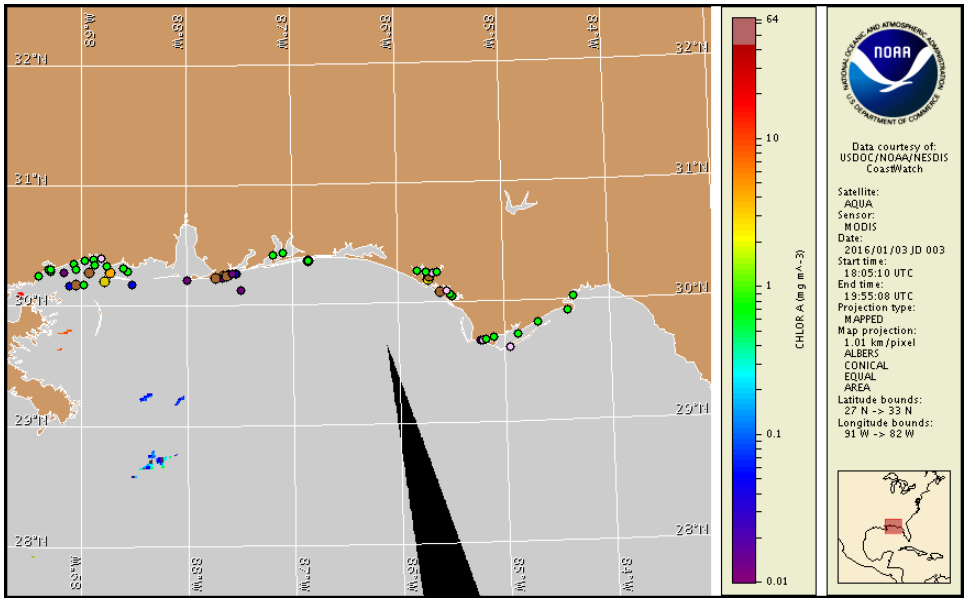
Monday, 04 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, December 31, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 26 to January 1: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to medium concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore St. Bernard Parish in Louisiana; Harrison and Jackson counties in Mississippi; Mobile and Baldwin counties in Alabama; and portions of northwest Florida from Escambia to Franklin counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore Louisiana, Mississippi, Alabama, and northwest Florida Monday, January 4 to Thursday, January 7 is listed below:

County Region: Forecast (Duration)
St. Bernard Parish: Very Low (M-Th)
Harrison County: Very Low (M-Tu), Low (W-Th)
Jackson County: High (M-Tu), Moderate (W-Th)
Mobile County: Low (M-Th)
Baldwin County: Very Low (M-W), Low (Th)
Escambia County: Very Low (M-W), Moderate (Th)
Santa Rosa County: Very Low (M-W), Moderate (Th)
Okaloosa County: Very Low (M-W), Moderate (Th)
Bay County, bay regions: Moderate (M-Th)
Gulf County, west bay regions-St. Joseph Bay area: Very Low (M-Th)
Gulf County, east bay regions-Indian Lagoon area: Very Low (M-Th)
All Other NWFL County Regions: None expected (M-Th)
SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Respiratory irritation was reported in Okaloosa County, FL. Dead fish were reported in Gulf County, FL.

Analysis

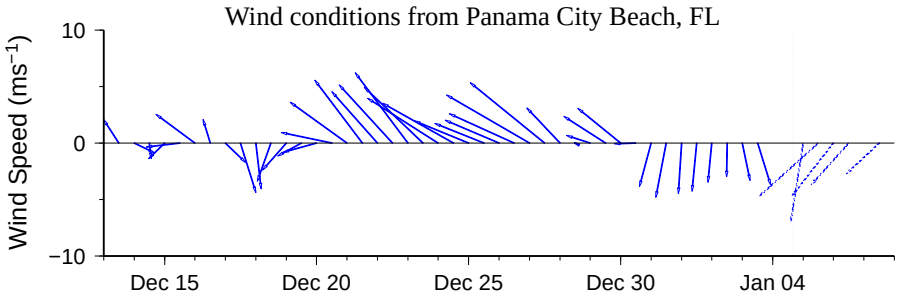
Samples collected along- and offshore Louisiana, Mississippi, Alabama, and northwest Florida indicate not present to 'medium' *Karenia brevis* concentrations from St. Bernard Parish, LA to Franklin County, FL. In northwest Florida, recent sampling alongshore Santa Rosa County detected a single 'low b' concentration at Navarre Beach Pier while sampling within the Pensacola Bay region indicated *K. brevis* was not present (FWRI; 12/29-30). No new samples have been received in Louisiana, Mississippi, and Alabama since the previous bulletin. Respiratory irritation was reported in Okaloosa County, FL and dead fish were reported in Gulf County, FL (MML; 12/31-1/4). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Recent ensemble imagery (MODIS Aqua, 1/3), has been obscured by clouds along the coast from St. Bernard Parish, Louisiana, to Franklin County, Florida, preventing analysis.

Forecast winds today through Thursday may promote the potential for westerly transport of surface *K. brevis* concentrations along the coasts of St. Bernard Parish of Louisiana,

Mississippi, Alabama, and northwest Florida.

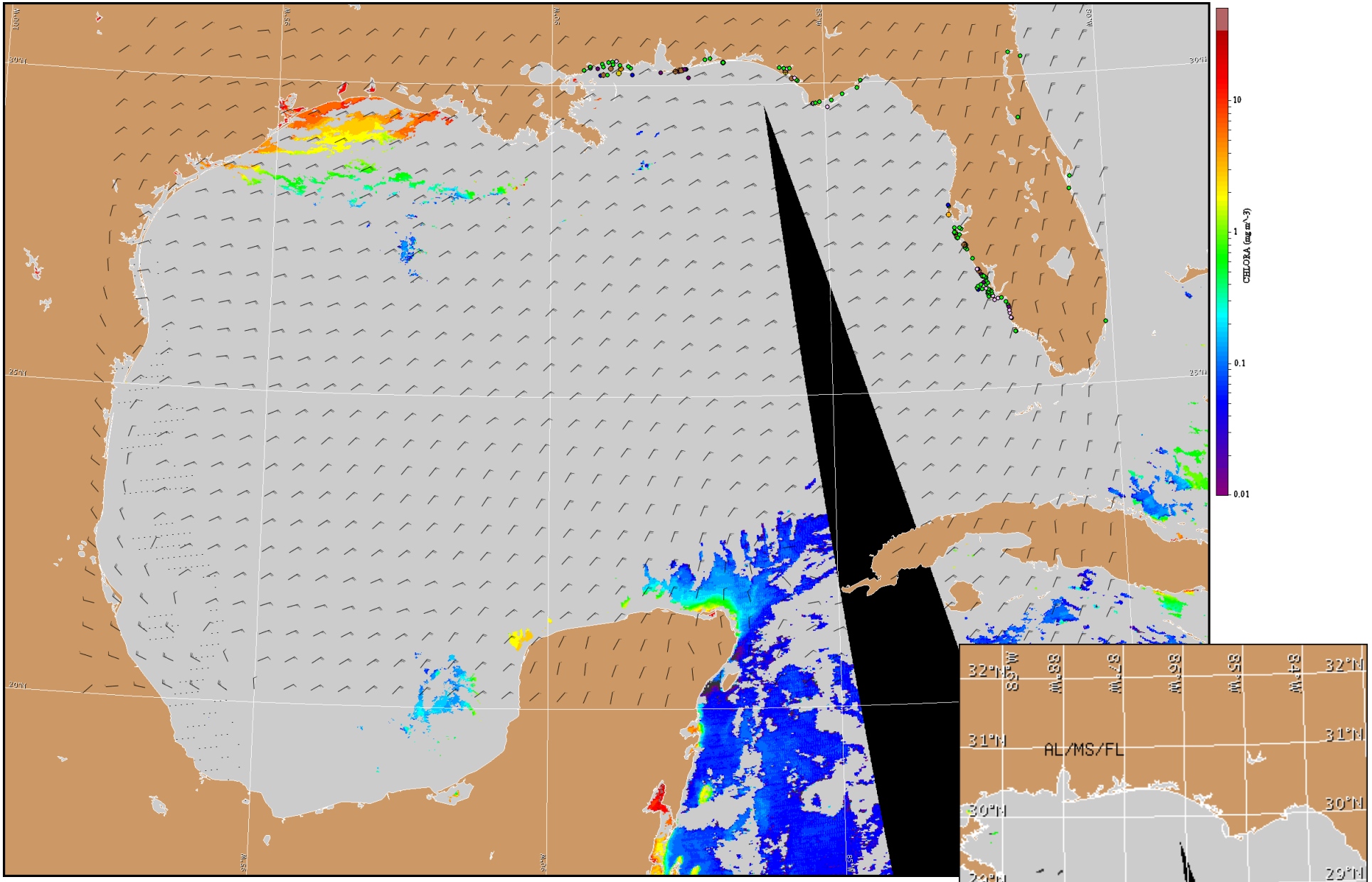
Davis, Yang



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Gulf counties: North winds (15-20kn, 8-10m/s) today becoming northeast to east winds (15-25kn, 8-13m/s) tonight through Thursday. Southeast winds (15kn, 8m/s) Thursday night.



Satellite chlorophyll image and forecast winds for January 5, 2016 12Z with points representing cell concentration sampling data from December 26 to January 1: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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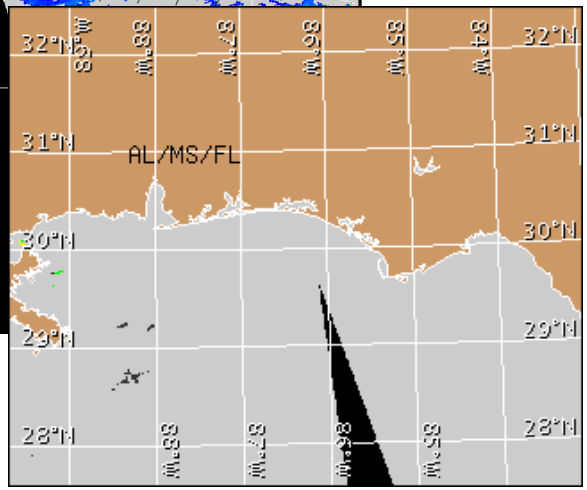

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).